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# MINERAL FILLERS -CALCIUM CARBONATE-

## **HUBERCARB®** Q Series

#### PRODUCT DESCRIPTION:

The Hubercarb product line of ground calcium carbonates is one of the broadest lines in the world. Grades vary from coarse granular extenders to ultrafine fillers with the option of various surface treatments and physical properties. In most cases, one of the Hubercarb Q Series products mined in Quincy, Illinois will fit your needs. Other series are available based on production locations. Huber also produces a line of very pure, low crystalline silica content named the Hubercarb W Series. These calcium carbonates have a very low tendency to pick up moisture. Calcium carbonates are also commonly referred to as: limestone, whiting, marble, natural calcite and chalk. Calcium carbonates are FDA acceptable under GRAS regulation, 182.5191. This makes them acceptable under 177.2600, rubber articles for food contact.

TYPICAL CHEMICAL PROPERTIES:		TYPICAL CHEMICAL ANALYSIS:				
pH	9.3	Calcium Carbonate	96.5%			
Mohs Hardness	3.0	Magnesium Carbonate	2.0%			
Specific gravity	2.7	Silica & Silicates	1.2%			
Refractive Index	1.66	Other	0.3%			

### **TYPICAL PROPERTIES:**

Q SERIES:	Q2	Q3(T)*	Q4	Q6	Q325	Q200	Q100
Hegman Grind, ASTM D-1210	6.5	6.0	6.0	4.0			
Med. Particle Size, μm	2.0	3.0	4.0	6.0	13	19	24
Dry Brightness, ASTM C-110	90	89	88	87	86	84	83
Oil Absorption, ml/100 gr.	16	15	17	16	14	12	12
Moisture, % ASTM D-280	0.20	0.20	0.20	0.15	0.10	0.05	0.05
Loose Bulk Density, lbs./ft <sup>3</sup>	41	40	40	45	50	55	55
Comp. Bulk Density, lbs./ft <sup>3</sup>	55	60	60	65	75	80	80

#### **APPLICATION:**

Calcium carbonates are general purpose, non-reinforcing fillers utilized primarily as extenders in rubber and plastic applications to reduce cost. High loadings are incorporated into formulations with relatively low viscosity build up, minimal change in physical properties and good color development. Typical loadings are from 20 phr to up to 300 phr. The slightly alkaline nature of these extenders may affect the cure rate of some rubber compounds with high loadings. Many rubber compounders will add hydrocarbon resins to their formulations (5-15 phr) when using these fillers to help "wet out" the filler and improve dispersion and physical properties of the compound. Surface treatments with stearates and rosins of Hubercarbs (for example, \*Q3-T is a 1% stearic-treated version of Q3) are available to promote: easier incorporation, improved dispersion and physical properties, reduce moisture pick up and lower mixing/extrusion power. Granulated forms are available.

<sup>\*</sup> Hubercarb is a registered trade name of J.M. Huber, Engineered Materials Sector rh 11/23/2020 t-hubercarb O